REMARKS

These remarks are in response to the Office Action dated June 19, 2003, which has a shortened statutory period for response set to expire September 19, 2003. A three-month extension, to expire December 19, 2003, is requested in a petition filed herewith.

Claims

Claims1-47 are pending in the above-identified application. Claims 1-47 are rejected over prior art. Claim 1 is amended, and Claims 2-47 remain as filed or as previously amended. Reconsideration is requested.

Claim Objections

Claims 1 is objected to in view of 37 CFR 1.75, because the recitation "said server" lacks antecedent basis. "Said server" is amended herein to now recite "said origin server." Withdrawal of the objection is respectfully requested.

Rejections Under 35 U.S.C. § 103

Claims 1, 2, 8, 9, 11, 12, 16-21, 27, 28, 30, 31, and 35-38:

Claims 1, 2, 8, 9, 11, 12, 16-21, 27, 28, 30, 31, and 35-38 are rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,185,598 (Farber) in view of U.S. Patent No. 6,115,755 (Krishan). Applicants respectfully traverse.

M.P.E.P. §2143 sets forth the requirements of a *prima facie* case of obviousness:

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Regarding **Claim 1**, the Examiner writes:

> 7. Regarding **claim 1**, Farber discloses the invention substantially. Farber discloses *an interface device operatively coupled to an internal bus of an origin server, a method for managing connections between at least one client and said origin server* [see Farber, Col. 8, lines 47-67], *said method comprising the steps of: establishing a network connection with one of said clients via a network* [see Farber, Col. 7, lines 1-26]; *receiving a communication from said client via said network connection* [see Farber, Col. 7, lines 46-67 and Col. 8, lines 1-67]; *establishing a bus connection with said origin server* [see Farber, Col. 7, lines 3-67 and Col. 8, lines 1-67]; *and forwarding said client communication to said origin server via bus connection* [see Farber, Col. 7, lines 36-37 and Col. 8, lines 1-67]. However, Farber does not explicitly disclose via an internal bus of said server.
> 8. In the same field of endeavor, Krishan discloses (e.g., proxy server to router traffic). Krishan discloses *via an internal bus of said server* [see Krishan, Col. 6, lines 36-55].
> 9. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Krishan's teachings of proxy server in routing traffic with the teachings of Farber, for the purpose of providing proxy software to route traffic and to allow several computers to connect to the same network card [see Krishan, Col. 3, lines 25-40], and thus Farber does provide motivation to combine by stating the reflector (reverse proxy), to either be co-located on a particular server are to be used as a plug-in [see Farber, Col. 5, lines 30-34] for example the one used within Krishan. By this rational **claim 1** is rejected.

Applicants appreciate the Examiner's clear statement of grounds for rejection. The citations to particular passages of the cited references are particularly helpful.

Initially, Applicants respectfully traverse the Examiner's assertion that Krishan is in the same field of endeavor as Farber. As the Examiner correctly points out, the reflector of Farber functions in some cases as a reverse proxy server, which represents the origin server. In contrast, the proxy server software of Krishan is a forward proxy server. Differences between forward proxy servers and reverse proxy servers were set forth in Applicants' prior response, and are incorporated herein by reference in their entirety.

Indeed, the Farber reference itself recognizes the distinction between proxies that represent clients and proxies that represent origin servers. For example, at Col. 1, lines 63-63, Farber recites:

> Several companies offering proxy caches describe them as replication tools. However, proxy caches differ because they are operated on behalf of clients rather than publishers.

This passage implicitly acknowledges that forward and reverse proxies function in a significantly different manner, and cannot, therefore, be expected to be functionally interchangeable.

For the foregoing reasons, Applicants respectfully assert that Farber and Krishan are not from the same field of endeavor.

Claim 1 recites (in part): "establishing a bus connection with said origin server via an internal bus of said origin server." Neither of the cited references disclose this limitation of Claim 1. In Krishan, proxy server software running in program memory 66 (FIG. 5) arguably establishes a bus connection with host computer 50 via PCI bus interface 38. However, host computer 50 is a client machine and not an origin server. There is no indication whatsoever that host computer 50 is operating as an origin server. Farber also does not disclose "establishing a bus connection with said origin server," as recited in Claim 1. Rather, Farber merely indicates that reflector 108 and origin server 102 are co-located, and that reflector 108 may be a "plug in" module that becomes part of the origin server 102. As will be explained in greater detail below, a "plug in" is **not** the same thing as an adapter card, but rather is a software module that is typically run on the same processor as the application program that it "plugs in" to.

Because the cited references do not disclose "establishing a bus connection with said origin server via an internal bus of said origin server," as recited in Claim 1, they do not teach or suggest all of the limitations of Claim 1. Therefore, the third element of the prima facie case of obviousness is not met, and no prima facie case of obviousness is established. Applicants, therefore, respectfully request reconsideration and withdrawal of the rejection of Claim 1.

The first element of the prima facie case of obviousness is also not met. In particular, there is no suggestion or motivation to combine the teachings of Farber and Krishan. The purpose of the Krishan reference is to provide an inexpensive means to share an Internet

connection with other computers on a local network. There is no indication whatsoever in Farber of the need or desire to **share a network connection** with other origin servers.

The Examiner asserts that Farber provides a motivation to combine the references "by stating the reflector (reverse proxy), to either be co-located on a particular server [or] to be used as a plug-in [citation omitted] for example the one used within Krishan.

Applicant respectfully asserts that the Examiner has misinterpreted the Farber reference, with respect to the term "plug-in." Unfortunately, the Krishan reference contributes to the misinterpretation by the improper use of term "plug-in" to describe an adapter card. Actually, the term "plug-in" is a term of art that describes software modules that add functionality to certain application programs. For example, in an on-line "High-Tech Dictionary" (http://www.computeruser.com/resources/dictionary) the term "plug-in" is defined as follows:

> An accessory program that enhances a main application. An example is the set of additional tools and effects available to Photoshop image editor in the Plug-ins folder. There are many such plug-ins for Netscape Navigator such as Shockwave and Crescendo MIDI player that give the browser special capabilities, especially for multimedia Web sites.

As an example, the Examiner is directed to the main patents page of the U.S.P.T.O. web site (http://www.uspto.gov/main/patents.htm), which includes a link labeled "Plugins and viewers – PDF, patent images" that directs users to a number of downloadable software modules. Thus, the Office's use of the term "plug-in" on its web site is consistent with the meaning advanced herein by Applicant.

Further, even assuming that there is an alternative acceptable meaning of the term "plug-in" that includes hardware such as the adapter cards of Krishan, it is clear that Farber is using the term "plug-in" in the more conventional software sense. Indeed, it appears that the disclosure of Farber is primarily directed to software running on the same machine (co-located). For example, origin server 102 is described at Col. 4, lines 41-48 as follows:

> Origin server 102 is a server at which resources originate. More generally, the origin server 102 is any process or collection of processes that provide resources in response to requests from a client 106. Origin server 102 can be any off-the-shelf Web server. In a preferred embodiment, origin server 102 is typically a Web server such as Apache server or Netscape Communications Corporation's Enterprise™ server.

Note that the term "Web server" is used to describe off-the-shelf software packages. Farber then indicates at Col. 4, lines 57-63 that reflector 108 can be integrated into the Web server software, as follows:

> In addition, the reflector 108 might be fully integrated into the data server 112 (for instance, in a Web Server). These components might be loosely integrated based on the use of extension mechanisms (such as so-called add-in modules) or tightly integrated by modifying the service component specifically to support the repeaters.

In other words, reflector 108 can be provided as a plug-in, or can be directly integrated into the code of the Web server. The notion that reflector 108 is software running on the same system (presumably on the same processor) as the Web server is bolstered further by Farber's statement at Col. 7, lines 37-38 that: "In this invention reflector 108 effectively takes the place of an ordinary Web server or origin server 102." Recall that Farber uses the term "Web server" to describe off-the-shelf software packages.

The bottom line is that Farber is referring to software "plug-ins" for Web server applications. The disclosure of Farber does not appear to be concerned at all with hardware issues, and certainly makes no mention of adapter cards. Thus, when properly interpreted, there is no suggestion or motivation in Farber to run reflector 108 on an adapter card.

Because there is no suggestion or motivation to combine the references, no prima facie case of obviousness is established with respect to Claim 1.

For the foregoing reasons Applicants request reconsideration and withdrawal of the rejection of Claim 1 under 35 U.S.C. § 103. In particular, the first **and/or** third elements of the prima facie case of obviousness are not met with respect to Claim 1. Further, Krishan is not from the same field of endeavor as Farber.

Claims 2-38 depend either directly or indirectly from Claim 1 and are, therefore, distinguished from the cited prior art for at least the reasons provided above with respect to Claim 1. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejections of Claims 2, 8, 9, 11, 12, 16-21, 27, 28, 30, 31, and 35-38 under 35 U.S.C. §103.

Claims 3-7, 10, 13-15, 22-26 and 32-34:

Claims 3-7, 10, 13-15, 22-26 and 32-34 are rejected under 35 U.S.C. §103(a) as being unpatentable over Farber in view of Krishan, and further in view of U.S. Patent No. 6,389,462 (Cohen). Each of these claims depends either directly or indirectly from Claim 1, and therefore includes all of the limitations of Claim 1. As indicated above, Farber and Krishan fail to establish a prima facie case of obviousness with respect to Claim 1. Further, there is no assertion that Cohen provides either the missing elements or the suggestion to combine not found in Farber or Krishan. Therefore, no prima facie case of obviousness is established with respect to any of Claims 3-7, 10, 13-15, 22-26 and 32-34. For at least the foregoing reasons, Applicants respectfully request reconsideration and withdrawal of the rejections of Claims 3-7, 10, 13-15, 22-26 and 32-34 under 35 U.S.C. §103.

Claims 39-47:

Claims 39-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishan in view of Farber.

Applicants respectfully traverse, because there is no suggestion to provide the adapter card 60 of Krishan with a reverse proxy application. In particular, adapter card 60 of Krishan is specifically designed to share a single Internet connection among a plurality of client computers 52. It is well established that a proposed modification cannot render the prior art unsatisfactory for its intended purpose. "If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." MPEP §2143.01, citing *In re Gordon,* 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). Providing the adapter card of Krishan with a reverse proxy application, while possibly allowing it to serve as a reverse proxy for an origin server, would render it unsatisfactory for its intended purpose of sharing a single Internet connection among a plurality of client computers. Thus, the proposed modification is improper, and no prima facie case of obviousness is established with respect to Claim 39.

At a minimum, the proposed modification would change the principle of operation of the adapter card of Krishan, which is also prohibited. "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.

MPEP §2143.01, citing *In re Ratti,* 270 F.2d 810, 123 USPQ 349 (CCPA 1959). Combining the references as suggested by the Examiner would change the principle of operation of the Krishan adapter card from serving as a forward proxy for clients to serving as a reverse proxy for an origin server. Thus, the proposed combination is improper, and no prima facie case of obviousness is established with respect to Claim 39.

Finally, Applicant points out that the motivation asserted by the Examiner to combine the references in the rejection of Claim 39 is the same as the motivation provided in the rejection of Claim 1. Applicants respectfully assert that that combination is also improper for at least the reasons set forth above with respect to Claim 1. In particular, the reference in Farber to a plug-in is directed to a software module, and not an adapter card.

Claims 40-47 depend either directly or indirectly from Claim 39, and are distinguished from the cited prior art for at least the same reasons. Thus, Applicants request withdrawal of the rejections of Claims 39-47.

For the foregoing reasons Applicants request reconsideration and withdrawal of the rejections under 35 U.S.C. § 103 of Claims 1-47.

Double Patenting Rejections:

Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting over Claims 1 and 15 of U.S. Patent No. 6,308,238. Claim 39 is rejected under the judicially created doctrine of obviousness-type double patenting over Claims 43 and 49 of U.S. Patent No. 6,308,238.

Applicants respectfully traverse. In each rejection, the only basis for the rejections is that the rejected claims of the present application are generic to the respective claims of the issued patent. However, this is insufficient, by itself, to support a double patenting rejection.

> Domination and double patenting should not be confused. They are two separate issues. One patent or application "dominates" a second patent or application when the first patent or application has a broad or generic claim which fully encompasses or reads on an invention defined in a narrower or more specific claim in another patent application. Domination by itself, i.e., in the absence of statutory or nonstatutory double patenting grounds, cannot support a double patenting rejection. MPEP §804(II).

Further, in the present application, one-way obviousness is insufficient to support a double patenting rejection. A two-way obviousness test must be applied, because Applicant's could not have filed the claims in a single application and there has been an administrative delay on the part of the Office. MPEP §804(II)(B)(1)(b). In particular, U.S. Patent No. 6,308,238 (the '238 patent) was issued on an application that was filed as a continuation-in-part of the present application. Claims 1, 15, 39, and 49 of the '238 patent could not have been filed in the instant application, because they include limitations directed to a particular buffer allocation scheme that had not yet been invented at the time of filing the present application. Further, the '238 patent issued on October 23, 2001, nearly a year prior to the mailing of the first office action in the present application on October 2, 2002.

Applicant respectfully asserts that the two-way obviousness test is not met, because the claims of the '238 patent include limitations directed to a non-obvious buffer allocation scheme not recited in the claims of the present application. Indeed, the CIP application, upon which the '238 patent issued, was filed specifically to disclose and claim the inventive buffer allocation scheme improvement, and the patentability of that buffer allocation scheme was expressly argued in the CIP application.

For the foregoing reasons, Applicants respectfully request reconsideration and withdrawal of the obviousness-type double patenting rejections of Claims 1 and 39.

For the foregoing reasons, Applicants believe Claims 1-47 are in condition for allowance. Should the Examiner undertake any action other than allowance of Claims 1-47, or if the Examiner has any questions or suggestions for expediting the prosecution of this application, the Examiner is requested to contact Applicants' attorney at (269) 279-8820.

Respectfully submitted,

Date: 12/19/03

Larry E. Henneman, Jr.

Larry E. Henneman, Jr., Reg. No. 41,063
Attorney for Applicant(s)
Henneman & Saunders
714 W. Michigan Ave.
Three Rivers, MI 49093